APPLICANT'S RESPONSE TO APPEAL

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June 19, 2009

Hand Delivered

Board Chair Susan M. Lessard
c/o Terry Hanson
Board of Environmental Protection
#17 State House Station
Augusta, ME 04333-0017

Re: Department Orders L-24402-24-A-N, L-24402-TH-B-N, and L-24402-IW-C-N
Evergreen Wind Power III, LLC - Rollins Wind Project

Dear Chair Lessard:

Enclosed please find an original and 11 copies of Evergreen Wind Power's Response to Appeal and the accompanying Appendix of Exhibits. Thank you for consideration of these materials.

Sincerely,

Juliet T. Browne

JTB/prf
Enclosures
cc: Commissioner David Littell (w/enc.)
Becky Maddox (w/enc.)
Peggy Bensinger, Assistant Attorney General (w/enc.)
Cynthia S. Bertocci, BEP Executive Analyst (w/enc.)
Lynne A. Williams, Esq. (w/enc.)
Ryan Chaytors (w/enc.)
Brooke Barnes (w/enc.)

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF

Evergreen Wind Power III, LLC	)	
Lincoln, Lee, Winn, Burlington,	)	
Mattawamkeag, Penobscot County	)	EVERGREEN WIND
ROLLINS WIND PROJECT	)	POWER III, LLC
L-24402-24-A-N (approval)	)	RESPONSE TO APPEAL
L-24402-TH-B-N (approval)	)	
L-24402-IW-C-N (approval)	)	

Evergreen Wind Power III, LLC ("Evergreen") hereby responds to the appeal of the above-captioned Order filed by Friends of Lincoln Lakes and several individuals (collectively the "Appellants").

INTRODUCTION

The Appellants claim that the Department of Environmental Protection (the "Department") failed to conduct an adequate review of Evergreen's Application to construct the Rollins Wind Project (the "Project") and that the Department made flawed conclusions regarding potential noise, health and wildlife impacts associated with the Project. On the contrary, the Department's determination that the Project complies with all applicable laws and regulations is well supported by the record. As discussed below, the record demonstrates that the information in Evergreen's Application was confirmed by independent peer review and inter-agency consultation, and that all of the Appellants' claims were addressed by Evergreen and thoroughly evaluated by the Department during the permitting process.

BACKGROUND

On October 30, 2008, Evergreen submitted an Application to the Department for permits to develop the Project pursuant to the Natural Resources Protection Act ("NRPA"), 38 M.R.S.A. § 480-A et seq., and the Site Location of Development Act ("Site Law"), 38 M.R.S.A. §§ 481-490 (the "Application"). The Project is a 60-megawatt wind energy facility consisting of 40 wind turbines, approximately nine miles of 115-kilovolt transmission line, collector lines, an electrical substation, an operation and maintenance building, and access roads. The Project has facilities in several municipalities in southeastern Penobscot County, including Lincoln, Winn, Lee, Burlington and Mattawamkeag. It is located within the organized area of the State and is therefore an expedited wind energy development under the recently enacted "An Act to Implement Recommendations of the Governor's Task Force on Wind Power Development," 2007 Public Law Chapter 661 (the "Wind Power Act"). A full description of the Project is included in Section 1 of the Application.[1]

Prior to filing the Application, Evergreen published notice of its intent to file in the Lincoln News and sent by certified mail a copy of the notice of intent to file to all owners of property abutting the Project. On October 15, 2008, Evergreen held a public information meeting in Lincoln in accordance with Chapter 2 of Department Rules. Evergreen went well beyond the legal requirements for meetings. Evergreen held public information meetings in Lincoln on August 20, 2008, and in Lee on September 17, 2008. Evergreen also had meetings with numerous associations and stakeholders in the Project area, including public meetings with the Lincoln Town Council (June 16, 2008, and June

[1] A copy of Section 1 of the Application is included as Exhibit 1 in the accompanying Appendix of Exhibits.

23, 2008); the Lee Selectmen and Planning Board (June 30, 2008); the Burlington Selectmen and Planning Board (June 24, 2008); and the Winn Selectmen (July 1, 2008). Additional meetings were held with the Egg Pond Association (August 2, 2008); the Madagascal Pond Association (August 31, 2008); the Mattawamkeag Wilderness Park managers; the Penobscot Off Road Riders (August 7, 2008); and the Dwinal Pond ATV Club (October 6, 2008).

By letter dated November 21, 2008, the Department informed Evergreen that the Application was deemed complete and that the Department would begin its review.

On December 10, 2008, the Friends of Lincoln Lakes ("FOLL"), through its attorney Lynne Williams, requested that the Department hold a public hearing on the Application pursuant to Chapter 2 of Department Rules. In its request, FOLL made general allegations that the Project would not comply with NRPA, Site Law, Chapter 315 of Department Rules, and state and federal water quality standards. FOLL asserted that "there will be credible conflicting technical information presented on these issues" but failed to identify or describe any information that it intended to present. By letter dated January 7, 2009, Department Commissioner David Littell informed FOLL and other interested parties that the Department had determined that a public hearing was not warranted because no credible conflicting technical information had been identified.[2]

In the same letter, however, Commissioner Littell notified interested parties that the Department would hold a public meeting pursuant to 38 M.R.S.A. § 345-A(5). The purpose of the meeting was to provide all interested parties an opportunity to provide information to and ask questions of the Department staff. By letter dated January 15,

[2] A copy of the January 7, 2009, letter from Commissioner Littell is included as Exhibit 2 in the accompanying Appendix of Exhibits.

2009, the Department provided additional notification to interested persons of the public meeting.[3] On February 11, 2009, the Department held a public meeting in Lincoln, at which all interested parties were given the opportunity to speak, submit evidence, and ask questions of the Department. In addition to Department staff, Warren Brown from EnRad Consulting ("EnRad") and Mark Caron from the Maine Department of Inland Fisheries & Wildlife ("IF&W") were present to hear public input and answer questions. Numerous members of the public, including many of the Appellants, made comments, asked questions, and submitted written information, and everybody who wished to speak was afforded an opportunity to do so.

On April 3, 2009, the Department issued responses to questions and concerns that were raised at the public meeting or were submitted to the Department in writing ("Department's Response to Comments").[4] The responses address in detail the questions posed to the Department over the course of the application review process, including all of the issues that the Appellants have raised in this appeal. The responses specifically address the "conflicting technical information" that Appellants cite in support of their request for a public hearing.

Throughout December of 2008 and January and February of 2009, the Department, in addition to its internal review, consulted with and received comments on the Application from all relevant state agencies, including IF&W, the Maine Natural Areas Program, the Maine Historic Preservation Commission, the Public Utilities Commission, the State Planning Office, and the Department of Marine Resources. In

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[3] A copy of the Department's January 15, 2009, letter is included as Exhibit 3 in the accompanying Appendix of Exhibits.

[4] A copy of the Department's Responses to Comments is included as Exhibit 4 in the accompanying Appendix of Exhibits.

particular, IF&W reviewed the Project's potential impacts to vernal pools, inland waterfowl and wading bird habitats, bald eagles, deer wintering areas, and birds and bats. See IF&W comments, January 5, 2009.

On April 7, 2009, the Department issued a draft order on the Application to all interested parties, including officers of FOLL and several of the individually named Appellants. Although the Department solicited comments on the draft order, with the exception of Evergreen, none of the interested parties submitted substantive comments on the draft order to the Department. On April 21, 2009, the Department issued a final order approving the Rollins Wind Project ("Order").[5] On May 21, 2009, the Appellants filed this appeal [6]

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[5] A copy of the Department's Order is included as Exhibit 5 in the accompanying Appendix of Exhibits.

[6] At least some of the individually named Appellants have alleged sufficient injury to demonstrate standing to appeal the Order and therefore Evergreen does not dispute that the Board has jurisdiction to hear the appeal. Several of the Appellants, however, including FOLL, lack standing and therefore the Board should dismiss them as parties to the appeal.

Even under the Board's liberal "aggrieved person" requirement, in order to have standing appellants must show they have suffered a "particularized injury." 38 M.R.S.A. § 341-D(4)(A); 06-096 CMR, Chapter 2, §§ 1(B), 24(B)(1). To do so, an appellant must show that the Department's permitting decision adversely and directly affects the appellant's "property, pecuniary, or personal rights." Seven Islands Land Co. v. Maine Land Use Regulation Comm'n, 450 A.2d 475, 484 (Me. 1982). Such harm must be "distinct from the harm experienced by the public at large." Nergaard v. Town of Westport Island, 2009 ME 56, ¶ 18. Many of the appellants claim they were harmed by the "poor quality of the project review," "politically motivated decision-making" and the DEP's "political agenda." Petition at 2, 6. Others find fault with the "frivolous use of taxpayer dollars" in approving the project and some complain about the lack of any benefits "to the local community" or the fact that the community will "not get the power that is produced" by the Project. Id. at 5-6. Finally, one appellant simply states that "this project and others like it should be stopped" until "adequate" studies are done to show the "true impact of wind turbines on the environment, on humans and on wildlife." Id. at 3. None of these are allegations of harm to any appellant's "property, pecuniary or personal rights." Although some appellants expressly claim to have suffered some sort of adverse impact to their property, the remaining individual appellants, including Elaine Goodwin, Gordon Johnson, Karl McGillvray and Don Smith, have not alleged harm distinct from the harm allegedly experienced by the public and therefore the Board should dismiss them as parties to the appeal. Nergaard, 2009 ME 56, ¶ 18.

Moreover, for appellant FOLL, an organization has standing to bring suit only "when its members would otherwise have standing to sue in their own right." Friends of the Earth v. Laidlaw, 528 U.S. 167, 180-181 (2000) (emphasis added). According to its articles of incorporation, FOLL has no members. See

DISCUSSION

I. EVERGREEN'S SOUND STUDY, WHICH WAS CONFIRMED BY INDEPENDENT PEER REVIEW, DEMONSTRATES THAT THE PROJECT COMPLIES WITH DEPARTMENT SOUND STANDARDS.

Evergreen's expert sound consultant, Resource Systems Engineering ("RSE") prepared a detailed sound level assessment that was subjected to third-party peer review and which confirms that the Project complies with the Department's noise regulations. Moreover, all of the Appellants' arguments relating to sound impacts were considered by the Department during its review of the Project and explicitly addressed in the Department's Response to Comments. Accordingly, the Appellants' claims that the sound level assessment is flawed and that the Department did not consider all relevant evidence are unfounded.

A. The Applicant Utilized a Conservative Sound Model that Has Been Calibrated Based on Actual Operating Data and Peer Reviewed by EnRad

RSE prepared a detailed sound level assessment (the "RSE Report") that demonstrates the Project complies with applicable sound regulations. See Application § 5.[7] The objective of the study was to determine the expected sound levels from operation of the Project and compare those levels with the standards set forth in Chapter 375 of the Departments' regulations. Id. at 1. Using a CADNA/A computer model that calculates outdoor sound propagation, sound level contours for operation of the Project were determined and mapped for the entire study area, and the results were then compared to the applicable sound level limits of Chapter 375. Id. at 9. In determining the applicable

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FOLL Articles included as Exhibit 6 in the accompanying Appendix of Exhibits. The organization has not and cannot allege a particularized injury and accordingly the Board should dismiss FOLL as a party to the appeal.

[7] A copy of the RSE Report is included as Exhibit 7 in the accompanying Appendix of Exhibits.

sound level limits, RSE conservatively adopted the so-called quiet limits typical of rural areas. Id. at 10. As a result, RSE assumed that the nighttime limit of 45 dBA would apply to areas within 500 feet of a residence and the daytime limit of 55 dBA would apply to areas beyond 500 feet, on protected locations. Id.

The model utilized by RSE is based on international ISO standards commonly used for calculating outdoor sound propagation, RSE Report at 8, and is based on conditions favorable to sound propagation. For example, the model was run with the following conservative assumptions:

- 5 dBA was added to the manufacturer sound power levels to account for the uncertainty due to sound level attenuation calculations under the ISO standards (+/- 3 dBA), and the uncertainty factor in the manufacturer specifications (+/- 2 dBA). RSE Report at 8-9.

- The model assumes that all turbines are operating at maximum continuous sound output and that a moderate wind is blowing simultaneously from each turbine to each receiver point. RSE Report at 7-8.

- Surrounding lakes and ponds were mapped as reflective surfaces and therefore were not assigned any ground absorption. Other areas were modeled as a mix of soft (porous) and hard (reflective) ground surfaces. Similarly, the model excludes attenuation from foliage, which has the potential to reduce sound levels. RSE Report at 8-9.

RSE has substantial expertise not only with application of the Maine sound regulations, but with evaluating sound associated with the specific model of turbines proposed for the Rollins Project. For example, RSE completed four rounds of quarterly sound monitoring at the operating Mars Hill wind farm, which also utilizes the GE 1.5 sle turbines, which are to be used for the Project. As a result, the predictive model has been calibrated through collection of data at Mars Hill to yield the upper end of sound levels measured at similar wind turbines operating under a wide variety of weather and site conditions. RSE Report at 8-10.

Inexplicably, Appellants claim that the Department "should have solicited independent technical information on the impacts of noise and sound to be produced by this project." Petition at 6. In fact, the Department arranged for independent peer review of the RSE Report by Warren Brown at EnRad. See Rollins Wind Project Sound Level Assessment – Peer Review, prepared by Warren L. Brown of EnRad Consulting (hereinafter "EnRad Peer Review").[8] EnRad is well versed in the DEP's sound regulations, having been retained by the Department to review the monitoring data at Mars Hill. EnRad confirmed the methods and findings that resulted from quarterly noise testing at Mars Hill by RSE. EnRad confirmed that the methods and conclusions of the RSE Report were reasonable and technically correct, see EnRad Peer Review at 6, and on that basis the Department concluded that "the sound modeling techniques used by the applicant are in keeping with standard industrial sound modeling protocols." Order at 9.

Accordingly, the Department found, based on substantial record evidence, that the Project would comply with the Chapter 375 sound standards. Id. at 8 ("The applicant has demonstrated, through the creation of a sound propagation model, that the expected operational sound levels associated with the proposed Rollins Wind Project will be in compliance with the 45 dBA nighttime limit at all protected locations adjacent to the proposed project.").

B. Point Source Calculations Are Appropriate for Sound Modeling of Wind Turbines

The Appellants claim that Evergreen should have used line source rather than point source calculations in the sound modeling for the Project. Petition at 9. The Appellants provide no support for the contention that point source calculations are

[8] A copy of the EnRad Peer Review is included as Exhibit 8 in the accompanying Appendix of Exhibits.

inappropriate other than the assertion that "generally accepted scientific practices" call for line source calculations. Id. The RSE Report calculated turbine sound emissions consistent with the intended use and objectives of IEC 61400-11, Wind Turbine Generator Systems – Part 11: Acoustic Noise Measurement Techniques (2002), which is the accepted international standard for determining sound power levels from wind turbines. RSE Report at 8. IEC 61400-11 provides a methodology for determining the apparent sound power level of the wind turbine generator system as a point source at the rotor center with the same emission in the downwind direction as the wind turbine being measured.

Regardless of the Appellants' contention regarding methodology, the accuracy of the model used by RSE has been verified and calibrated by actual field measurements taken at operational wind turbines. RSE Report at 8, 10. RSE has measured sound output at working wind turbine generator systems for which RSE also generated pre-construction predictive models. By comparing the model projection to the actual sound produced by the operational turbine strings, RSE is able to calibrate the model to ensure it accurately describes the upper range of sound pressure levels, including the calculated attenuation, created by the turbines under a variety of operating conditions.

The Appellants had the opportunity to and did in fact submit information to the Department regarding line source calculations, but did not provide any credible or scientifically substantiated evidence demonstrating that turbines should be modeled as line sources. See, e.g., Steinberg Submission, March 24, 2009 (assuming but not providing any information, such as measurements of operating wind turbines or recognized international standards, to support the claim that turbines should be modeled

as line sources). The Department considered this submission and, in consultation with EnRad, found the Appellants' claim to have no scientific or numerical basis. In its response to public comments, the Department stated:

> The Department and EnRad both reviewed the information submitted by RSE based on the point source analysis and are in agreement that the difference between point source analysis and line source analysis is insignificant; therefore, the Department is satisfied with the point source analysis that was used for this study.

Department Responses at 35-36.

Accordingly, the Appellants' unsubstantiated allegation that the use of point source analysis in the RSE sound model is insufficient to predict the Project's sound impacts is not supported by the evidence and is without merit.

C. Calculations Regarding Attenuation due to Vegetation and Terrain Are Appropriately Conservative

The Appellants state that sound attenuation due to vegetation and terrain should not be used in sound modeling when turbines are "line of sight to homes." Petition at 9. The Appellants, the Department and Evergreen are in agreement here. Accordingly, attenuation due to vegetation was omitted from sound projections for the Project. RSE Report at 8-9 ("model calculations exclude attenuation from foliage, which has the potential to reduce sound levels"); Order at 7 ("the model calculations excluded attenuation from foliage"). The model does calculate attenuation due to *intervening* terrain between the turbine hub and all points five feet above ground level. Importantly, where turbines are line of sight to these receiver points, the model calculation would yield zero sound level attenuation due to terrain.

Accordingly, the Appellants' objections regarding sound attenuation due to foliage and terrain are without merit.

D. Appellants' Objections to the dBA Standard are Unavailing

The Appellants incorrectly claim that the RSE Report is flawed because it calculates sound in terms of dBA ("A-weighting") rather than dBC ("C-weighting"). As the Appellants are aware, however, the applicable noise regulations impose sound limits expressed in terms of A-weighting. See 06-096 CMR Chapter 375, § 10. Because the Appellants have no basis to claim that the Project fails to comply with the Department's noise regulations as they are written, the Appellants have no choice but to protest that the regulations are flawed because they evaluate sound impacts on an A-weighted scale. As discussed below, however, the Department's comprehensive sound regulations, including the use of the A-weighting, are protective and appropriate for regulating sound, including sound associated with wind energy developments.

The Chapter 375 noise regulations establish a comprehensive program for regulating sound associated with developments.[9] They were the result of a more than two-year process of stakeholder and expert input. The rulemaking included two public hearings, eight public workshop sessions, several draft rules, and substantial public comment to which the Department responded. See Basis Statement for Chapter 375 § 10.[10] To address the potential adverse impacts associated with noise from developments, the regulations establish sound level limits at project boundaries and protected locations, which include parcels of land containing a residence. 06-096 CMR Chapter 375, §

[9] A copy of the Chapter 375, Section 10 Control of Noise regulations is included as Exhibit 9 in the accompanying Appendix of Exhibits.

[10] A copy of the Basis Statement to the Chapter 375, Section 10 Control of Noise regulation is included as Exhibit 10 in the accompanying Appendix of Exhibits.

10(C). Limits at protected locations range from 55 dBA to 70 dBA during the daytime, and 45 dBA to 60 dBA during the nighttime, depending on existing uses and ambient sound levels in the area. The more stringent limits, 55 dBA during the daytime and 45 dBA during the nighttime, apply in quiet rural areas. Id.

The Chapter 375 noise standards relate to the regulation of audible sound and therefore the sound limits are expressed in terms of dBA, which is a measurement of sound that is weighted by frequency to simulate the hearing response of humans. RSE Report at 2. Specifically, sound is audible to humans at frequencies that range roughly from 20 Hz to 20,000 Hz, with greater sensitivities above 1,000 Hz. Id. at 1. As a result, the dBA scale places less emphasis on low and medium frequency sound (below 1,000 Hz) than, by comparison, does the dBC scale. The dBC scale is closer to a linear or "flat" measurement where sound levels are unweighted for all frequencies.

Appellants' claim that existing regulations should be modified to measure compliance based on dBC is premised on the flawed assumption that there are adverse health effects associated with low frequency sound from wind turbines. Low frequency sound is a common environmental factor that stems from both natural and man-made sources, including wind, ocean waves, traffic, and various types of machinery. See "Infrasound from Wind Turbines – Fact, Fiction or Deception," Geoff Leventhall, at 2 (2006) ("2006 Leventhall Report").[11] As discussed in Section II below, the Maine Center for Disease Control, which evaluated the information submitted by Appellants and others, determined that there is no credible evidence of adverse health effects caused by low frequency sound related to wind turbines.

[11] A copy of the 2006 Leventhall Report is included as Exhibit 11 in the accompanying Appendix of Exhibits.

Moreover, in January, 2008, the Department evaluated the Chapter 375 noise regulations and concluded they conformed to the best practices of the National Research Council's 2007 report on the "Environmental Impacts of Wind-Energy Projects" and were appropriate for evaluating sound from wind power turbines. See January 10, 2008 Memorandum from Andrew Fisk to Commissioner Littell Regarding DEP Standards on Noise and Shadow Flicker at Windpower Projects.[12] The Department's conclusion reflected its vast experience with the noise regulations generally as well as the peer review of pre- and post-development noise studies at Mars Hill. Id. Similarly, IEC 61400-11, the accepted international standard for determining sound power levels from wind turbines, specifies the use of A-weighted sound levels for characterizing wind turbine noise emissions.

The Department could have summarily dismissed the Appellants' request to apply a dBC standard when reviewing this project because it has no basis in current regulations. However, the Department and its independent sound expert did consider the information submitted by the Appellants and found the arguments regarding the need to apply dBC standards unpersuasive. The Department and EnRad found that there is "no concrete scientific basis to conclude that a dBC . . . compliance standard would provide an improved method of determining sound level compliance. The dBA standard provides a reasonable compliance measurement." Department Responses at 27-28. Further, as the Appellants note in their own petition, the Department found that the "A-weighting scale is widely used in noise ordinances and sound control regulation. The introduction of C-

[12] A copy of the 2008 Department Memorandum is attached as Exhibit 12 in the accompanying Appendix of Exhibits.

weighting for the assessment of wind turbine sound is preliminary and unrefined on a broad basis." Order at 8; Department Responses at 26.

In summary, the issue of A-weighting versus C-weighting in the measurement of wind turbine sound was raised during the review process, evaluated by the Department and EnRad, and addressed in the Department's responses to public comment. Therefore, the Appellants' unsupported claim that the RSE Report is flawed because it does not address C-weighting is without merit.

E. The Order Fully Addresses Concerns About Amplitude Modulation

The Petition appears to mistakenly equate Appellants' concerns about low frequency sounds and C-weighting with amplitude modulation or short duration repetitive sounds. See Petition at 7-8 (discussing dBC or C-weighting and amplitude modulation) and 9 (equating health concerns with short duration repetitive sounds). In the context of wind turbine noise, amplitude modulation refers to a "thump-thump" or "swish-swish" sound that may result when the turbine blades spin particularly at the maximum blade passage frequency of once per second. The sound level fluctuations of amplitude modulation can vary depending on atmospheric conditions and the speed of the turbine blade. See 2006 Leventhall Report at 5-6. Certain types of amplitude modulation that result in short duration repetitive (SDR) sounds have the potential to be annoying and are specifically addressed in the sound regulations. See 06-096 CMR Chapter 375, § 10(C)(1)(e). SDR sounds are defined as a sequence of sound events, each clearly discernable, that cause an increase of 6 dBA or more in the sound level observed before and after the event. Id. § 10(G)(19). Because they can be annoying, there is a 5 dBA "penalty" that applies when SDR sounds occur. Specifically, 5 dBA is added to the

observed levels of the SDR sounds for purposes of determining compliance with the applicable standards. Id. § 10(C)(1)(e).

As noted in the Order, the Department concluded that analysis of amplitude modulation (or SDR sounds) is beyond the scope of models that calculate outdoor sound propagation. Order at 7. Based on technical literature and measurements of operating wind turbines, RSE concluded that although sound levels from turbine operations can fluctuate over brief periods, they do not typically result in SDR sounds. RSE Report at 10. Nonetheless, based on the comments from EnRad and the potential for SDR sounds to occur, and to ensure that the applicable limits are met during all operating conditions, the Order requires Evergreen to implement a compliance assessment method for use during selected meteorological and background sound conditions. The compliance assessment method was developed in consultation with EnRad and the Department. It is designed to measure operating sound levels under those meteorological conditions most favorable for sound propagation and when maximum amplitude modulation will occur. Order at 7; see also Rollins Wind Project Wind Turbine Sound Compliance Assessment Plan, final revised April 6, 2009.[13] In the unlikely event that (i) SDR sounds frequently occur, and (ii) that as a result of SDR sounds the Project exceeds applicable noise limits, the Applicant is required to submit for Department review and approval a revised operation protocol to ensure that the Project will be in compliance at all protected locations. Order at 8-9.

[13] A copy of the Sound Compliance Assessment Plan is included as Exhibit 13 in the accompanying Appendix of Exhibits.

II. APPELLANTS' CLAIMS REGARDING HEALTH EFFECTS WERE CONSIDERED FULLY AND THE DEPARTMENT FOUND THEM TO BE WITHOUT MERIT

The Appellants claim, again without any support, that the Department "cavalierly dismissed" any potential health impacts of the Project. Petition at 13. As the Appellants note in their own Petition, the Department consulted with the Maine Centers for Disease Control ("MCDC") regarding potential health-related impacts associated with wind turbines. Order at 8. Dora Anne Mills, MD, the director of the MCDC and Maine's chief health officer, researched the issue of wind turbine noise and found "no evidence in peer-reviewed medical and public health literature of adverse health effects from the kinds of noise and vibrations heard by wind turbines other than occasional reports of annoyance." Id.; see also Wind Turbine Neuro-Acoustical Issues, Dora Anne Mills, MD, MPH, Maine CDC/DHHS, Feb. 13, 2009, at 3 (hereinafter "MCDC Report").[14]

Appellants claim, as is their wont, without any scientific basis that low frequency noise from wind turbines has been found to produce unspecified "adverse health effects." Petition at 12. The Appellants submitted information to the Department during the review process that purportedly supports this claim. See generally Submissions by Gary Steinberg dated Feb. 11, 2009 and Feb. 17, 2009; Undated Submission by Harry Epp.

Dr. Mills of the MCDC reviewed these and other articles that raise concerns about low frequency noise related to wind turbines. The information relied upon by the Appellants is based on anecdotal rather than scientific evidence and, as such, is neither credible nor persuasive. With respect to an open letter from medical staff at Rumford Community Hospital expressing concern about wind turbine noise, one of the doctors

[14] A copy of the MCDC Report is included as Exhibit 14 in the accompanying Appendix of Exhibits.

responsible for the letter conceded that the concerns were speculative. See Kathryn Skelton, "As Maine Preps for Wind Power, Medical Staff at Rumford Hospital say Turbines Make People Sick. Others Beg to Differ," Sun Journal Feb. 15, 2009.

There is, however, a considerable body of scientific, peer-reviewed evidence that the Department and Dr. Mills considered, and which demonstrates that low frequency sound from wind turbines does not pose a measurable health risk. For example:

- Eja Pedersen, Noise Annoyance from Wind Turbines, Swedish Environmental Protection Agency (2003) ("There is no scientific evidence that noise at levels created by wind turbines could cause health problems other than annoyance.")

- Health Assessment Section, Bureau of Environmental Health, Ohio Department of Health, Literature Search on the Potential Impacts Associated with Wind-to-Energy Turbine Operations, (2008) ("No evidence was found to indicate adverse health impacts in humans caused by infrasound levels generated by modern wind turbines")

- Danish Electronics, Light and Acoustics, Low Frequency Noise from Large Wind Turbines: A Procedure for Evaluation of the Audibility for Low Frequency Sound and Literature Study (2008) ("Low frequency is one of the two lowest ranking sound characteristic descriptors in relation to annoyance.")

- Geoff Leventhall, Infrasound from Wind Turbines – Fact, Fiction or Deception, Canadian Acoustics, Vol. 34 No. 2, at 29 (2006) ("[T]here is insignificant infrasound from wind turbines and . . . there is normally little low frequency noise.")

The record clearly shows that the MCDC reviewed the medical literature on wind turbine noise, as well as concerns raised by the health officials in Rumford to whom the Appellants' petition alludes. MCDC Report at 3-4; Petition at 11. The MCDC also specifically considered the potential health effects of low-frequency vibrations and infrasound, concluding that low frequency sound levels associated with the Project do not pose any health risk. MCDC Report at 4.

The Appellants' claim that "the DEP failed to follow their own regulations when refusing to consider health impacts and denying that there was any medical evidence addressing this issue," Petition at 11-12, is simply untrue. The Department did exactly what a regulatory agency should do. It carefully considered the information on health impacts, including the information submitted by Appellants, sought expert review of that information through the MCDC, and, on the basis of substantial record evidence, concluded that there would be no measurable health impacts associated with the Project. See Order at 8; Department Responses at 21-22.

III. BOTH PRE-CONSTRUCTION STUDIES AND POST-CONSTRUCTION MONITORING ASSURE NO UNREASONABLE ADVERSE IMPACT ON WILDLIFE

The Appellants argue that the Department "should have demanded valid pre-construction wildlife studies and the development of a pre-construction habitat plan before issuing the Order." Petition at 14.

As a threshold matter, the Appellants' claim ignores the fact that Evergreen conducted extensive studies of plant and animal species within the Project area in both 2007 and 2008. Application § 7 at Appendix 7-3; Order at 16. These surveys were done in consultation with IF&W, which found the surveys to be consistent with those conducted for similar projects in Maine. Department Responses at 3. Specifically, Evergreen submitted to the Department nocturnal radar surveys, diurnal raptor surveys, and acoustic bat surveys conducted in the fall of 2007 and the spring of 2008 that catalogued the number and type of avian wildlife in the area. Application § 7 at Appendix 7-3; Order at 18. The Application also addresses the presence of bald eagles in

the region and notes the mapped bald eagle nest (BE-468A) outside of the Project area but within one mile of a proposed turbine site.[15] Application § 7.3.3.[16]

The Appellants do not (and can not) allege that the pre-construction wildlife studies submitted by Evergreen are invalid, let alone provide any evidence relevant to the studies' validity or to the validity of the Department's finding of no adverse impact. The Appellants have chosen to ignore the fact that comprehensive wildlife and habitat surveys were conducted in consultation with IF&W and submitted for Department and inter-agency review. In addition, the Appellants fail to identify any wildlife impacts that are not discussed in the Application and addressed by the Department and IF&W in their review of the Project.

In addition to the comprehensive pre-construction studies described above Evergreen will implement a post-construction plan to monitor the Project's potential impacts on wildlife, particularly bats and birds (including eagles). See Avian and Bat Monitoring Protocol, Application § 7 at Appendix 7-5.[17] IF&W will retain oversight over the monitoring protocol. Order at 20. Information obtained through the monitoring protocol will be used to reduce and offset potential impacts to wildlife by providing a basis for changes to Project operation if necessary. Id. If post-construction monitoring reveals any unreasonable impacts, Evergreen is required to implement measures to avoid, minimize, or mitigate those impacts. Id.

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[15] The Appellants state that bald eagles have been de-listed from the federal endangered species list but remain listed in Maine. However, the bald eagle was de-listed under Maine law as well on May 26, 2009.

[16] A copy of the Application Section 7 narrative regarding wetlands, wildlife and fisheries is included as Exhibit 15 in the accompanying Appendix of Exhibits.

[17] A copy of the Avian and Bat Monitoring Protocol is included as Exhibit 16 in the accompanying Appendix of Exhibits.

Accordingly, although the Appellants complain that the Department's requirement of post-construction mortality studies will not be adequately protective, Petition at 14, in fact the post-construction monitoring requirement is an additional level of oversight, above that provided by review of the pre-construction surveys, to assure no unreasonable adverse impact on wildlife.

Finally, the Appellants claim that the Department should have required a "pre-construction habitat plan" or a "habitat conservation plan." Petition at 14. It is unclear from the Petition what plan requirement or legal standard the Appellants are referring to, but the Order includes specific habitat conservation measures that Evergreen is required to implement, in consultation with IF&W and the Department, to assure no undue adverse impacts. Those measures include, but are not limited to: shutting down turbines during periods of high risk; habitat management measures that will modify wildlife behavior and reduce the risk of impacts; and appropriate compensatory mitigation to ensure no net loss of habitat. Order at 20-21.

In summary, the combination of pre-construction surveys, post-construction monitoring, and the habitat management procedures outlined in the Order assure that the Project does not have an unreasonable adverse impact on wildlife or habitat.[18] Accordingly, there is substantial record evidence supporting the Department's determination that the Project will not result in undue adverse impacts to wildlife or habitat.

[18] The Appellants also reference the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act, neither of which are relevant to the Department's issuance of the Order. These federal statutes impose independent legal obligations that are separate and beyond those imposed by the laws and regulations administered by the Department. Evergreen is aware of the Eagle Act and the Migratory Bird Treaty Act, and intends to comply fully with both.

IV. APPELLANTS' REQUEST FOR A PUBLIC HEARING SHOULD BE DENIED

The Appellants have not identified with specificity any evidence they seek to introduce at a public hearing, let alone credible evidence that justifies a public hearing or otherwise meets the test for supplemental evidence. Therefore the Board should deny the request for a public hearing.

A. Appellants Have Failed to Identify Credible Conflicting Technical Information That Justifies Holding a Public Hearing on Appeal of the Department's Decision

Although discretionary with the Board, public hearings on appeals of Department decisions are typically based on an assessment of whether there is "credible conflicting technical information regarding a licensing criterion and it is likely that a public hearing will assist the decision maker in understanding the evidence." 06-096 CMR Chapter 2, § 7(B). Appellants make general assertions as to the existence of credible conflicting technical information, but do not provide the required supporting documentation. The BEP rules require that any person seeking a public hearing on an appeal include "a summary of all proposed testimony, including the name and qualifications of each witness." 06-096 CMR Chapter 2, § 24(B)(5). Appellants failed to do so. Instead, they provide only a general assertion that they would offer "an expert on the topic of turbine noise and sound impacts, as well as one or more experts on the topic of human health impacts of wind turbines." Petition at 12. Because Appellants fail to provide specific information on the testimony they seek to introduce and qualifications of the persons they seek to call as witnesses, their claim that there is conflicting credible technical evidence is hypothetical and unsupported.

Moreover, many if not all of the topics on which Appellants apparently seek to introduce evidence represent critiques of existing law, as opposed to evidence on whether a particular licensing criterion is met. For example, the Petition references Rick James of E-Coustic Solutions, but his testimony relates not to whether the Project meets the applicable licensing criteria, but is instead a critique of the existing noise regulations. See Petition at 7. Similarly, Appellants apparently believe that the requirement in Chapter 375 that compliance measurements be based on an A-weighting instead of a C-weighting is flawed. Id. at 7-8. At issue in this appeal, however, is whether the Project complies with the actual licensing criteria, and Appellants have not identified any specific, let alone credible, evidence that the applicable licensing criteria have not been met, or that would assist the Board in determining whether the Department erred in determining the applicable criteria had been met. Therefore, the request for a public hearing should be denied.

B. Appellants Have Not Identified Any Evidence That Meets the Test for Supplemental Evidence

For reasons discussed in Subsection C(1) below, the scope of any hearing held by the Board in an appeal of a permit for an expedited wind energy development is limited to evidence that meets the test for supplemental evidence. Supplemental evidence is permitted only when (a) the person seeking to submit such evidence showed "due diligence" in attempting to bring the information to the attention of the Department; or (b) the evidence is newly discovered and could not have been provided to the Department. 38 M.R.S.A. § 341-D(4)(A) and D(5); 06-096 CMR Chapter 2, § 24(B)(5)(a), (b). The purpose of this provision is to ensure certainty and predictability of decisions by requiring that all relevant information be brought forward and considered by

the Department during review of the application and that parties not wait to present evidence in the first instance during an appeal to the Board.

In their Petition, the Appellants have not identified any evidence they seek to introduce on appeal that they could not have presented to the Department during the application review. Indeed, the only evidence Appellants reference is evidence they concede was submitted to the Department and its outside experts during review of the Project. Appellants do not seek to introduce "supplemental evidence" on appeal; as is revealed in the Petition, they want a second bite at the proverbial apple in hopes that the Board, in reviewing the same information presented to the Department, will reach a different result. See Petition at 12 (stating desire that the Board "make a more informed decision than the DEP was willing or able to make"). That should not be permitted.

Irrespective of whether the Board reviews Appellants' hearing request pursuant to the standard governing appeals of Department decisions generally, or the more limited standard applicable to appeals of expedited wind energy developments, as discussed in Subsection C(2) below, there is no basis for holding a public hearing on the appeal. Appellants had a full opportunity to submit the technical information to the Department during the processing of the Application. Moreover, contrary to Appellants' assertions, the Department, its independent sound expert, and other State review agencies, carefully reviewed all the information in the record, including information submitted by Appellants, and concluded that the applicable licensing criteria were met.

While Appellants may advocate for a different result, that by itself does not justify holding a public hearing. Evergreen respectfully requests that the Board deny the request

for a public hearing and decide the appeal on the comprehensive and complete record reviewed by the Department.

C. Any Hearing on an Appeal of an Expedited Wind Energy Project is Limited to Supplemental Evidence

When the Legislature enacted the Wind Power Act, it altered the scope of any Board appellate hearing regarding an expedited wind energy development by limiting such hearings to taking evidence that meets the "supplemental evidence" standard set forth in the Board's rules. Accordingly, Appellants' request for a public hearing on the appeal should be denied for the independent reason that the evidence Appellants seek to introduce at a public hearing does not and cannot meet the test for supplemental evidence.

1. Hearings on Board Appeals of Expedited Wind Energy Developments Are Limited to Introduction of "Supplemental Evidence"

38 M.R.S.A. § 341-D(4) establishes the Board's jurisdiction to hear appeals and sets forth the process and standard of review for such appeals. For all appeals except those involving expedited wind energy developments, Section 341-D(4) provides that in issuing a decision on an appeal, the Board may base its determination on (1) the Department's record; (2) any supplemental evidence admitted by the Board; and (3) any evidence submitting during any hearing held by the Board. See 38 M.R.S.A. § 341-D(4)(A) (appeals by aggrieved parties of Department decisions), (B) (appeals initiated by the Board) and (C) (appeals to the Board under other provisions of law); see also 06-096 CMR Chapter 2, § 24(B)(7). With regard to hearings, under the statute and the rules whether to hold a hearing is discretionary, and the Board may hold a hearing for any

purpose it deems appropriate. See 38 M.R.S.A. § 341-D(4); 06-096 CMR Chapter 2, § 24(B)(1).

Appeals of expedited wind energy developments, such as the Rollins Project, however, are governed by a separate provision under Section 341, which expressly limits the scope of a Board hearing on an appeal. *Compare* 38 M.R.S.A. § 341-D(4)(D) *with* D(4)(A-C). Section 341-D(4)(D) provides that in an appeal of an expedited wind energy development, the Board *shall* base its decision on (1) the Department's record; and (2) any supplemental evidence. See 38 M.R.S.A. § 341-D(4)(D). This does not mean, necessarily, that the Board may not hold a hearing in an appeal of an expedited wind energy development. Instead, this change in the statute merely limits such hearings to those necessary to allow introduction of "supplemental evidence."

2. The Board Employs an Appellate Standard of Review in Appeals of Expedited Wind Energy Developments

This reading of the statute is consistent with the standard of review governing appeals of expedited wind energy developments. Prior to the enactment of the Wind Power Act, the standard of review for all Board appeals was the same. Specifically, Subsection 4(A) of Section 341-D states that

> The board is not bound by the commissioner's findings of fact or conclusions of law but may adopt, modify or reverse findings of fact or conclusions of law established by the commissioner.

This language indicates a *de novo* standard of review, with the Board free to ignore the Department's factual or legal findings and to substitute its judgment for the Department. Subsections 4(B) and 4(C), which prior to the enactment of the Wind Power Act denoted the only other types of appeals heard by the Board, each cross-referenced the

procedures or standard of review set forth in Subsection 4(A). Accordingly, the appellate standards were the same for all Board appeals.

When the Legislature enacted Subsection 4(D), however, it did not cross-reference the procedures or the standard of review in Subsection 4(A), nor did it include the language cited above. In omitting the language "[t]he board is not bound by the commissioner's findings...," the Legislature intended that the Board not be free to ignore the factual or legal conclusions of the Department. Further, the Legislature added new language regarding the standard of review not previously utilized in Subsections 4(A), 4(B) or 4(C), specifically, that "[t]he board may remand the decision to the department for further proceedings if appropriate." 38 M.R.S.A. § 341-D(4)(D). The omission of the "not bound" language and the inclusion of the "remand" language demonstrates that the Board applies an appellate, not *de novo*, standard of review for expedited wind energy developments.[19]

In an appellate capacity, the Board should reverse a permitting decision by the Department only upon a showing that the Department's action was arbitrary and capricious, or was otherwise not supported by substantial evidence in the record. See, e.g., Nergaard, 2009 ME 56, ¶ 11. This standard of review reinforces the argument above that the primary factual record is the Department's agency record and any Board hearing should be limited in scope to evidence that was not and could not have been considered by the Department.

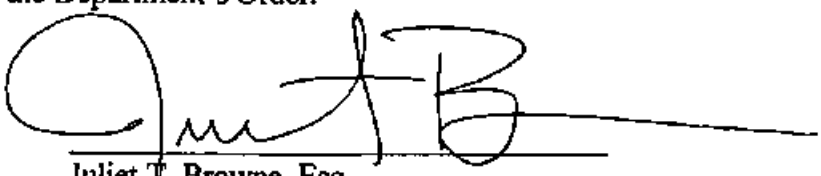
[19] This interpretation, that the Legislature intended the Board to serve solely in an appellate capacity, is also evidenced by the fact that the Board may not assert primary jurisdiction over any expedited wind energy development, but may act only as an appellate body. See 38 M.R.S.A. § 341-D(2).

CONCLUSION

As demonstrated by the foregoing, the Appellants' claims are without merit. The Department and its third-party sound expert thoroughly considered the Project's sound impacts and determined, based on substantial record evidence, that the Project complies with the Department's noise regulations. The Department, in consultation with the MCDC, fully considered the Project's potential health impacts and determined that there was no credible evidence that the Project would result in adverse health effects. The Department also found, based on consultation with IF&W, that Evergreen had demonstrated – through extensive pre-construction studies and a post-construction monitoring protocol – that the Project would not cause any undue adverse impact on wildlife. In addition, the Appellants have failed to identify any credible conflicting evidence that would justify the Board holding a public hearing. Nor have the Appellants identified any evidence that meets the test for supplemental evidence.

Accordingly, Evergreen respectfully requests that the Board deny the Appellants' request for a public hearing and uphold the Department's Order.

Dated: June 19, 2009



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